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ABSTRACT

Training and development professionals play a unique role in helping people improve their performance by using all aspects of the work environment to make those improvements occur. These professions are currently debating the existence of an integrated theoretical framework and how it might support practice in their field. Human performance technology (HPT) has been proposed as a systems-based field of study for training and development. The goal of the HPT field is to use systems approaches to ensure that individuals have the knowledge, skills, motivation, and environmental supports required to do their jobs effectively and efficiently. The conceptual domain of HPT is defined by management, development, and systems functions. In terms of professional preparation, academic programs for training and development should be based on a set of core competencies and a unique theoretical base such as human performance technology. Jacobs has listed 11 propositions from the study of HPT. The following are among those propositions: human performance and behavior are different and knowledge of the difference is important for achieving goals in HPT; organizational as well as individual goals must be considered in defining worthy performance; and exemplary performance provides the most logical referent for determining job performance standards. (MN)

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ERIC DIGEST No. 74

Clearinghouse on Adult, Career, and Vocational Education

HUMAN PERFORMANCE TECHNOLOGY

Training and development (T&D) professionals play a unique role in helping people improve their performance by using all aspects of the work environment to make those improvements occur. These practitioners are currently debating the existence of an integrated theoretical framework and how it might support practice in their field. This ***ERIC Digest*** examines the dimensions of T&D and proposes human performance technology as an appropriate field of study to support and guide practice.

Dimensions of Training and Development

Training and development is a relatively new professional career choice that embodies a variety of specialties and responsibilities, whose general purpose is to foster a desired change in the performance of a defined audience in an on-the-job environment (Goldstein 1980). Most definitions of a profession include among its attributes specialized areas of knowledge and skill, intensive preparation for practice, and conformity to ethical and technical standards.

Recently, studies have been conducted to identify distinct areas of knowledge and skill in training and development. For example, the ***Models for Excellence*** (McLagan 1983) led to the identification of 15 distinct job roles and respective clusters of knowledge and skill that support each: evaluator, group facilitator, development counselor, instructional writer, instructor, manager, marketer, media specialist, needs analyst, program administrator, program designer, strategist, task analyst, theoretician, and transfer agent. A second major study (Foshay, Silber, and Westgaard 1986) focused specifically on one T&D job role and presented performance conditions as well as standards for their measurement. This study identified 16 competencies for the certification of instructional/training design specialists.

In terms of intensive preparation, there has been a dramatic increase in the number of academic programs that prepare persons for T&D job roles. The competencies identified in the studies just described have assisted curriculum planning. In regard to the third characteristics of a profession, T&D's relative youth means that issues of standards and ethics are still emerging.

Human Performance Technology

To contribute to the growth of T&D as a profession, Jacobs (1987) proposes human performance technology (HPT), a systems-based field of study for training and development. The goal of the human performance technology field is to use systems approaches to ensure that individuals have the knowledge, skills, motivation, and environmental supports to do their jobs effectively and efficiently. The conceptual domain of HPT can be defined by three key aspects:

Management Functions

- Guide, control, and facilitate the development of human performance systems

Development Functions

- Examine all aspects of a problem
- Relate results from a set of decisions to other decisions
- Use resources to develop performance systems

Systems Functions

- Provide a conceptual means of viewing the people, materials, events, and resources required to achieve goals

Understanding human performance is an integral part of the field. T&D professionals address such questions as: What type of performance requires changing? and Who is doing that performance? Performance is usually measured in terms of quality, quantity (or productivity), and cost; thus, human performance is inevitably linked to organizational performance or success. Both individual and organizational goals must be considered in attempting to improve performance.

Use of systems approaches to develop human performance systems is one of the most prominent aspects of the field. The end result of using a systems approach is a combination of materials, events, peoples, and strategies called a performance system. A performance system is the structure, within the work setting, in which people use resources and tools to perform their work. Human performance systems have five main components: (1) a job or context; (2) individual abilities, motivations, actions, decisions, and behavior; (3) responses required for performance; (4) consequences of the response; and (5) feedback on the consequences.

HPT is about engineering human performance. Because human performance is easier to measure objectively than human behavior, HPT proposes that knowing how to engineer performance and the conditions that affect it is more important than attempting to explain why certain behavior has occurred.

T&D professionals can use HPT to identify performance problems, needs, and goals. Techniques include the Front-End Analysis Model, the Behavioral Engineering Model, and the Performance Matrix. Assessment of needs and identification of goals can assist in the definition of exemplary performance. Once identified, knowledge of exemplary performance can be used to analyze why some individuals have not achieved it and to specify necessary steps that will lessen the gap between actual and ideal performance. Solutions to human performance problems might include training, job performance aids, feedback systems, employee selection, and organizational redesign.

Implications for Professional Preparation and Practice

From the preceding discussion, HPT can be defined as the development of human performance systems, and the management of that development, using systems approaches to achieve organizational and individual goals. What are the implications for professional practice? Boothe (1985) compared traditional and systems approaches to T&D along eight

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dimensions. A traditional approach might be defined as when the mission of T&D is primarily the design, delivery, and management of training programs. The comparison illustrates that, by using a systems approach, the goals of T&D activities become more congruent with that of the organization. The success of T&D professionals often depends on their effects on the organization's bottom line.

In terms of professional preparation, academic programs for T&D should be based on a set of core competencies and a unique theoretical base, such as HPT. T&D graduate programs should focus on specific job roles of professionals and should include a structured practicum experience.

Propositions of Human Performance Technology

In summary, Jacobs (1987) lists 11 propositions that have emerged from his study of human performance technology.

1. Human performance and human behavior are different, and knowledge of the difference is important for achieving the goals of the field.
2. Any statement about human performance is at least about organizational performance as well.
3. Costs of improving performance should be regarded as investments in human capital, yielding returns in terms of increased performance potential.
4. Organizational goals as well as individual goals must be considered to define worthy performance.
5. The domain of human performance technology consists of management functions, development functions, and systems functions.
6. Knowing how to engineer human performance and the conditions that affect it is as important as explaining why the behavior occurred.
7. To diagnose problems, one should analyze the present system and then examine the differences between it and an ideal system. To avoid anticipated problems, one should analyze the planned system and modify it to approximate an ideal system.
8. Exemplary performance provides the most logical referent for determining job performance standards.
9. Human performance problems can have different root causes, and these causes are generally classified as either originating from the person, from something in the person's environment, or from both.
10. Performance of one subsystem affects the performance of other subsystems in somewhat predictable ways requiring that problem causes be analyzed at more than one level of an organization.
11. Many different solutions may be used to improve human performance. Selection of any one solution is dependent upon the cause and nature of the performance problem, and the criteria used to evaluate a solution must include its potential to make a measurable difference in the performance system.

REFERENCES

This ***ERIC Digest*** is based on the following publication:

Jacobs, R. L. ***Human Performance Technology: A Systems-Based Field for the Training and Development Profession.*** Information Series no. 326. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, The National Center for Research in Vocational Education, The Ohio State University, 1987. (ERIC Document Reproduction Service No. ED 290 936)

Additional References

Boothe, B. "How to Successfully Apply Performance Technology in Organizations." ***Performance and Instruction*** 24, no. 7 (September 1985): 2-4.

Foshay, W.; Silber, K.; and Westgaard, O., eds. ***Instructional Design Competencies: The Standards.*** Iowa City: International Board of Standards for Training, Performance, and Instruction, 1986.

Goldstein, I. "Training in Work Organizations." ***Annual Review of Psychology*** 31 (1980): 229-272.

McLagan, P., ed. ***Models for Excellence: The Conclusions and Recommendations of the ASTD Training and Development Competency Study.*** Washington, DC: American Society for Training and Development, 1983.

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